IN THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning on page 1, line 20, with the following rewritten paragraph as follows:

In a conventional network system, routing technique according to a network layer protocol of anthe International Organization for Standardization/Open Systems Interconnection (ISO/OSI) reference model is used. Major protocols are the routing information protocol (RIP) of determining the most optimized route based on the number of routers existing on a route, the open shortest path first (OSPF) of determining a preferred route from a link state, and a border gateway protocol (BGP) of determining a preferred communication route between autonomous systems on the basis of properties of a link. According to the protocols, routers notify each other of routing information held in themselves, thereby propagating a network topology. By a calculating method determined for each protocol, on the basis of information such as address information defined in a network layer and the type of a communication line, a correspondence table (routing table) for indicating the relation between a destination of data and a destination interface is generated. --

Please replace the paragraph beginning on page 19, line 3, with the following rewritten paragraph as follows:

-- The configuration shown in FIG. 1 is realized mainly by software and is described only by processes in the layer upper than a transport layer in the

ISO/OSI reference model. Routing is determined in an upper layer. Transfer is executed by communicating with the lower layer protocol through the receiving and transmitting units. --